## Brief MISR Level 3 Product Descriptions

Component Global Georectified Radiance Product (CGGRP): MIL3DRD, MIL3MRD, MIL3QRD					
Grid	Field	Data Type	Description		
GeorectifiedRadianceAverage	Average	FLOAT32 -9999 = fill	This is the average radiance value, in $Wm^{-2}sr^{-1}\mu m^{-1}$ . This is indexed by y, x, camera, band. Camera has $0 = DF$ , $1 = CF$ , $2 = BF$ , $3 = AF$ , $4 = AN$ , $5 = AA$ , $6 = BA$ , $7 = CA$ , $8 = DA$ Band is $0 = Blue$ (443 nm), $1 = Green$ (555 nm), $2 = Red$ (670 nm), $3 = Infrared$ (865 nm).		
	Average count	INT32	This is the count of radiances used in the Average field. This has the same indices as Average.		
GeorectifiedRadianceCovariance	Covariance	FLOAT32 0 = fill	This is the variance and covariance between the radiances, in the units $W^2m^{-4}sr^{-2}\mu m^{-2}$ . This contains only the lower triangular part of the symmetric covariance matrix. This is indexed by x, y, and a covariance index.  For the covariance index, $0 = \text{Variance of the DF Blue}$ , $1 = \text{Covariance of the DF Blue}$ and DF Green, $2 = \text{Variance of DF Green}$ , and so on.		
	Covariance count	INT32	This is the count of the radiance pairs that are used in the Covariance. This has the same indices as Covariance.		
Component Global Aerosol Product (CGAS): MIL3DAE, MIL3MAE, MIL3QAE					
Grid	Field	Data Type	Description		
AerosolParameterAverage	Optical depth average	FLOAT32 -9999 = fill	Average of the aerosol optical depth. This is for green (555 nm) band. This is indexed by y, x.		
	Optical depth average count	INT32	Count of optical depths used in the Optical depth average.		
	Component	t Global Land Surface F	Product (CGLS):		
MIL3DLS, MIL3QLS					
Grid	Field	Data Type	Description		
Land Parameter Average	DHR average	FLOAT32 -9999 = fill	Average of DHR (Directional Hemispheric Reflectance). Defined as radiance exitance divided by irradiance under illumination from a single direction. Also known as the "black sky" albedo. This is indexed by y, x, and band.  Band is 0 = Blue (443 nm), 1 = Green (555 nm), 2 = Red (670 nm), 3 = Infrared (865 nm).		
	DHR average count	INT32	Count of DHR values used in DHR average. Same indices as DHR average.		
	DHRPAR average	FLOAT32 -9999 = fill	Average of DHR integrated over the Photosynthetically Active Radiation (PAR) band.		
	DHR Shortwave approximation aver points	FLOAT32 utegybyythe Atmospheric Scienc http://eosweb.larc.nasa.go	Average of DHR for a broad shortwave band (400 - 2500 nm), by Data Posterial from visible bands. This is indexed by y, x.		

	DHR Shortwave approxi-	INT32	Count of DHR Shortwave approximation average. Same indices				
	mation average count	111192	as DHR Shortwave approximation average.				
	FPAR average	FLOAT32 -9999 = fill	Average of Fractional absorbed Photosynthetically Active Radiation (FPAR). Defined as PAR irradiance absorbed by live vegeta-				
			tion divided by incident PAR irradiance.				
	FPAR average count	INT32	Count of FPAR values used in FPAR average. Same indices as FPAR average.				
	LAI average	FLOAT32 -9999 = fill	Average of Leaf Area Index (LAI). This is indexed by y, x.				
	LAI average count	INT32	Count of LAI values used in LAI average. Same indices of LAI average.				
	NDVI average	FLOAT32 -9999 = fill	Average of Normalized Difference Vegetation Index (NDVI). This is indexed by y, x.				
	NDVI average count	INT32	Count of NDVI values used in NDVI average. Same indices as NDVI average.				
Component Global Albedo Product (CGAS):							
	MIL3DAL, MIL3MAL, MIL3QAL						
Grid	Field	Data Type	Description				
AlbedoAverage_1_degree	Expansive albedo average - 1 deg	FLOAT32 -9999 = fill	Average of the expansive albedo. This is indexed by y, x, band. Band is 0 = Blue (443 nm), 1 = Green (555 nm), 2 = Red (670 nm), 3 = Infrared (865 nm), 4 = Broadband.				
	Expansive albedo stan- dard deviation - 1 deg	FLOAT32 -9999 = fill	Standard deviation of the expansive albedo. This is indexed by y, x, band.				
	Expansive albedo swath count - 1 deg	INT32	Number of swaths that contribute to average of the expansive albedo This is indexed by y, x, band.				
	Restrictive albedo average - 1 deg	FLOAT32 -9999 = fill	Average of the restrictive albedo This is indexed by y, x, band.				
	Restrictive albedo standard deviation - 1 deg	FLOAT32 -9999 = fill	Standard deviation of the restrictive albedo This is indexed by y, x, band.				
	Restrictive albedo swath count - 1 deg		Number of swaths that contribute to average of the restrictive albedo This is indexed by y, x, band.				
	Local albedo average - 1 deg	FLOAT32 -9999 = fill	Average of the local albedo This is indexed by y, x, band.				
	Local albedo standard deviation - 1 deg	FLOAT32 -9999 = fill	Standard deviation of the local albedo This is indexed by y, x, band.				
	Local albedo swath count - 1 deg	INT32	Number of swaths that contribute to average of the local albedo This is indexed by y, x, band.				

	Expansive albedo average	FLOAT32	Average of the expansive albedo This is indexed by y, x, band.
	- 5 deg	-9999 = fill	Band is $0 = \text{Blue } (443 \text{ nm}), 1 = \text{Green } (555 \text{ nm}), 2 = \text{Red } (670)$
			nm), $3 = Infrared (865 nm)$ , $4 = Broadband$ .
	Expansive albedo stan-	FLOAT32	Standard deviation of the expansive albedo This is indexed by y,
AlbedoAverage_5_degree	dard deviation - 5 deg	-9999 = fill	x, band.
	Expansive albedo swath	INT32	Number of swaths that contribute to average of the expansive
	count - 5 deg		albedo This is indexed by y, x, band.
	Restrictive albedo average	FLOAT32	Average of the restrictive albedo This is indexed by y, x, band.
	- 5 deg	-9999 = fill	
	Restrictive albedo stan-	FLOAT32	Standard deviation of the restrictive albedo This is indexed by y,
	dard deviation - 5 deg	-9999 = fill	x, band.
	Restrictive albedo swath	INT32	Number of swaths that contribute to average of the restrictive
	count - 5 deg		albedo This is indexed by y, x, band.
	Local albedo average - 5	FLOAT32	Average of the local albedo This is indexed by y, x, band.
	deg	-9999 = fill	
	Local albedo standard de-	FLOAT32	Standard deviation of the local albedo This is indexed by y, x,
	viation - 5 deg	-9999 = fill	band.
	Local albedo swath count	INT32	Number of swaths that contribute to average of the local albedo
	- 5 deg		This is indexed by y, x, band.